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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,318

11/25/2003

Murtuza Lokhandwalla

135858

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GENERAL ELECTRIC COMPANY
GLOBAL RESEARCH
PATENT DOCKET RM. BLDG. K1-4A59
NISKAYUNA, NY 12309

EXAMINER

CHENG, JACQUELINE

ART UNIT

PAPER NUMBER

3768

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/723,318

Applicant(s)

LOKHANDWALLA ET AL.

Examiner

Jacqueline Cheng

Art Unit

3768

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed November 6, 2006 have been fully considered but they are not persuasive. The examiner respectfully disagrees with the applicant's arguments that Godik does not disclose a tensioning apparatus of an inflatable bladder coupled to a membrane to apply a tensile force. In Godik, the tensioning apparatus (fig. 1) comprises an inflatable bladder (element 1' or 4') which comprises a membrane (element 1 or 4). This membrane is coupled to and part of the tensioning apparatus as a whole (fig 1, col. 4 line 7-15).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Entrekin et al. (US Publication No. 2004/0010193 A1) in view of Godik (US 6243,484 B1).

4. Entrekin et al. discloses a breast imaging system comprising compression plates for retaining a breast during an examination. One of the compression plates, which can be movable to apply a downward compression force (paragraph 0010), is formed by a polymeric membrane stretched under tension to provide a rigid but compliant surface (to allow for variation in size and shape of the tissue to be compressed). This surface can be either substantially acoustically

transparent for the conduct of a sonographic examination or radiographically transparent for the conduct of a mammographic examination (abstract). The lower compression membrane is held under tension, up to the tensile strength (tautly) of the polymeric sheet, in at least one dimension. The compression membrane is held by a support frame (fig. 2, element 32) which also supports the front, back, and side tensioning apparatus (fig. 2, elements 52, 64, 56). These tensioning apparatuses provide a mechanical command through screws in the frame that push the tension bars outwards against the membrane, increasing the tension of the membrane on the compression plate across the opening in both orthogonal directions (paragraph 0016-0018).

5. What Entrekin et al. does not disclose is the tensioning apparatus comprising an inflatable bladder. Godik discloses a device that has the same result of compressing tissue to be scanned for a medical device. Godik's device comprises a non-rigid object holder assembly that can be used in a mammoscopy system for performing accurate breast cancer screening. The breast is placed between two membranes, having a thickness of 30-150 um (col. 5 line 14-27), one of which is an inflatable bag that is inflated by a pneumatic unit that controls the pressure in the bags, creating tension (col. 3 line 1-25). Although Godik discloses the inflatable bag be pressure filled and does not expressly disclose the bag being inflated hydraulically, it would be a design choice as to how to apply the pressure to the bag. It would be obvious to one skilled in the art to provide pressure hydraulically versus pneumatically. Also providing pressure hydraulically would further the utility of applying the inflatable bag of Godik to Entrekin to be used as a coupling fluid for the ultrasonic transducer. Besides furthering the utility of Entrekin in this way, it would also be obvious to apply the inflatable bag of Godik to Entrekin to make the compressing used to immobilize the breast more comfortable. Godick discloses that a problem

with some mammography applications is the strong compression of rigid plates, such as the rigid compression plate (fig 1., element 12) of Entrekin.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Cheng whose telephone number is 571-272-5596. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3768

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 8700